IN THE CLAIMS

Please amend the claims as follows:

1-6. (Cancelled)

7. (Currently Amended) ~~The waveform, as set forth in claim 1,~~ A defibrillator comprising:

a biphasic voltage waveform generator circuit, the circuit generating a waveform that includes:

a positive voltage phase beginning at about zero volts and having an initial positive voltage magnitude greater than zero volts, the positive voltage phase having a first positively sloped portion extending from the initial positive voltage magnitude to a maximum positive voltage magnitude greater than the initial positive voltage magnitude wherein the first positively sloped portion comprises a continuously increasing slope; and

a negative voltage phase having an initial maximum negative voltage magnitude less than zero volts extending from the maximum positive voltage magnitude of the positive voltage phase, the negative voltage phase having a second positively sloped portion extending from the initial maximum negative voltage magnitude to a terminal negative voltage magnitude less than the initial maximum negative voltage magnitude.

8. (Currently Amended) ~~The waveform, as set forth in claim 1,~~ A defibrillator comprising:

a biphasic voltage waveform generator circuit, the circuit generating a waveform that includes:

a positive voltage phase beginning at about zero volts and having an initial positive voltage magnitude greater than zero volts, the positive voltage phase having a first positively sloped portion extending from the initial positive voltage magnitude to a maximum positive voltage magnitude greater than the initial positive voltage magnitude wherein the first positively sloped portion comprises a continuously

decreasing slope; and

a negative voltage phase having an initial maximum negative voltage magnitude less than zero volts extending from the maximum positive voltage magnitude of the positive voltage phase, the negative voltage phase having a second positively sloped portion extending from the initial maximum negative voltage magnitude to a terminal negative voltage magnitude less than the initial maximum negative voltage magnitude.

9. (Cancelled)

10. (Currently Amended) ~~The waveform, as set forth in claim 1,~~ A defibrillator comprising:

a biphasic voltage waveform generator circuit, the circuit generating a waveform that includes:

a positive voltage phase beginning at about zero volts and having an initial positive voltage magnitude greater than zero volts, the positive voltage phase having a first positively sloped portion extending from the initial positive voltage magnitude to a maximum positive voltage magnitude greater than the initial positive voltage magnitude; and

a negative voltage phase having an initial maximum negative voltage magnitude less than zero volts extending from the maximum positive voltage magnitude of the positive voltage phase, the negative voltage phase having a second positively sloped portion extending from the initial maximum negative voltage magnitude to a terminal negative voltage magnitude less than the initial maximum negative voltage magnitude wherein the second positively sloped portion comprises a continuously increasing slope.

11. (Currently Amended) ~~The waveform, as set forth in claim 1,~~ A defibrillator comprising:

a biphasic voltage waveform generator circuit, the circuit generating a waveform that includes:

a positive voltage phase beginning at about zero volts and having an initial positive voltage magnitude greater than zero volts, the positive voltage phase having a first positively sloped portion extending from the initial positive voltage magnitude to a maximum positive voltage magnitude greater than the initial positive voltage magnitude; and

a negative voltage phase having an initial maximum negative voltage magnitude less than zero volts extending from the maximum positive voltage magnitude of the positive voltage phase, the negative voltage phase having a second positively sloped portion extending from the initial maximum negative voltage magnitude to a terminal negative voltage magnitude less than the initial maximum negative voltage magnitude wherein the second positively sloped portion comprises a continuously decreasing slope.

12. (Currently Amended) A ~~biphasic defibrillator waveform~~ defibrillator comprising:

a biphasic voltage waveform generator circuit, the circuit generating a waveform that includes:

a positive voltage phase having an initial positive voltage magnitude equal to about zero volts and having a first positively sloped portion extending from the initial voltage magnitude to a maximum positive voltage magnitude greater than the initial voltage magnitude, the positive phase waveform shape independently selectable from a first set of wave form shapes; and

a negative voltage phase having an initial negative voltage magnitude less than or equal to zero volts extending from the maximum positive voltage magnitude of the positive voltage phase, the negative voltage phase having a second sloped portion extending from the initial negative voltage magnitude to a terminal negative voltage having a magnitude less than or equal to zero volts, the positive phase

waveform shape independently selectable from a first set of wave form shapes.

13. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 12, wherein the maximum positive voltage magnitude is in a range from about 200 volts to about 400 volts.

14. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 12, wherein the initial negative voltage magnitude is in a range from about 0 volts to about -400 volts.

15. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 12, wherein the terminal negative voltage magnitude is in a range from about 0 volts to about -400 volts.

16. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 12, wherein the first positively sloped portion comprises a substantially linear slope.

17. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 12, wherein the first positively sloped portion comprises a continuously increasing slope.

18. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 12, wherein the first positively sloped portion comprises a continuously decreasing slope.

19. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 12, wherein the second sloped portion comprises a positive slope.

20. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 19, wherein the second sloped portion comprises a substantially linear slope.

21. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 19, wherein the second positively sloped portion comprises a continuously increasing slope.

22. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 19, wherein the second positively sloped portion comprises a continuously decreasing slope.

23. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 12, wherein the second sloped portion comprises a negative slope.

24. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 23, wherein the second sloped portion comprises a substantially linear slope.

25. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 23, wherein the second positively sloped portion comprises a continuously increasing slope.

26. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 23, wherein the second positively sloped portion comprises a continuously decreasing slope.

27. (Currently Amended) A ~~biphasic defibrillation waveform~~ defibrillator comprising:

a biphasic voltage waveform generator circuit, the circuit generating a waveform that includes:

a positive voltage phase having an initial maximum positive voltage magnitude greater than zero volts and having a first negatively sloped portion extending from the initial maximum positive voltage magnitude to a terminal positive voltage magnitude less than the initial maximum positive voltage magnitude; and

a negative voltage phase having an initial negative voltage magnitude less than or equal to zero volts extending from the terminal positive voltage magnitude of the positive voltage phase, the negative voltage phase having a second sloped portion extending from the initial negative voltage magnitude to a terminal negative voltage having a magnitude less than or equal to zero volts.

28. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 27, wherein the initial maximum positive voltage magnitude is in a range from about 200 volts to about 400 volts.

29. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 27, wherein the terminal positive voltage magnitude is in a range from about 50 volts to greater than 0 volts.

30. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 27, wherein the initial negative voltage magnitude is in a range from about 0 volts to about -400 volts.

31. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 27, wherein the terminal negative voltage magnitude is in a range from about 0 volts to about -400 volts.

32. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 27, wherein the first negatively sloped portion comprises a substantially linear slope.

33. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 27, wherein the first negatively sloped portion comprises a continuously increasing slope.

34. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 27, wherein the first negatively sloped portion comprises a continuously decreasing slope.

35. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 27, wherein the second sloped portion comprises a positive slope.

36. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 35, wherein the second sloped portion comprises a substantially linear slope.

37. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 35, wherein the second positively sloped portion comprises a continuously increasing slope.

38. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 35, wherein the second positively sloped portion comprises a continuously decreasing slope.

39. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 27, wherein the second sloped portion comprises a negative slope.

40. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 39, wherein the second sloped portion comprises a substantially linear slope.

41. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 39, wherein the second ~~positively~~ negatively sloped portion comprises a continuously increasing slope.

42. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 39, wherein the second ~~positively~~ negatively sloped portion comprises a continuously decreasing slope.

43-49. (Cancelled)

50. (Currently Amended) ~~The waveform, as set forth in claim 48,~~ A defibrillator comprising:

a biphasic voltage waveform generator circuit, the circuit generating a waveform that includes:

a positive voltage phase having an initial positive voltage having a magnitude greater than or equal to zero volts and having a first sloped portion extending from the initial positive voltage to a terminal positive voltage having magnitude greater than or equal to zero volts wherein the first sloped portion comprises a continuously increasing positive slope; and

a negative voltage phase having an initial negative voltage having a magnitude less than or equal to zero volts extending from the terminal positive voltage of the positive voltage phase, the negative voltage phase having a second sloped portion extending from the initial negative voltage to a terminal negative voltage having a

magnitude less than or equal to zero volts.

51. (Currently Amended) ~~The waveform, as set forth in claim 48,~~ A defibrillator comprising:

a biphasic voltage waveform generator circuit, the circuit generating a waveform that includes:

a positive voltage phase having an initial positive voltage having a magnitude greater than or equal to zero volts and having a first sloped portion extending from the initial positive voltage to a terminal positive voltage having magnitude greater than or equal to zero volts wherein the first sloped portion comprises a continuously decreasing positive slope; and

a negative voltage phase having an initial negative voltage having a magnitude less than or equal to zero volts extending from the terminal positive voltage of the positive voltage phase, the negative voltage phase having a second sloped portion extending from the initial negative voltage to a terminal negative voltage having a magnitude less than or equal to zero volts.

52. (Currently Amended) ~~The waveform, as set forth in claim 43,~~ A defibrillator comprising:

a biphasic voltage waveform generator circuit, the circuit generating a waveform that includes:

a positive voltage phase having an initial positive voltage having a magnitude greater than or equal to zero volts and having a first sloped portion extending from the initial positive voltage to a terminal positive voltage having magnitude greater than or equal to zero volts, wherein the first sloped portion comprises a negative slope, the positive phase waveform shape independently selectable from a first set of waveform shapes; and

a negative voltage phase having an initial negative voltage having a magnitude less than or equal to zero volts extending from the terminal positive voltage of the positive voltage phase, the negative voltage phase having a second sloped portion extending from the initial negative voltage to a terminal negative voltage having a

magnitude less than or equal to zero volts, the negative waveform shape independently selectable from a second set of waveform shapes.

53. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 52, wherein the first sloped portion comprises a substantially linear slope.

54. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 52, wherein the first sloped portion comprises a continuously increasing slope.

55. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 52, wherein the first sloped portion comprises a continuously decreasing slope.

56-57. (Cancelled)

58. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim ~~56~~ 52, wherein the second ~~positively~~ sloped portion comprises a continuously increasing positive slope.

59. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim ~~56~~ 52, wherein the second ~~positively~~ sloped portion comprises a continuously decreasing positive slope.

60. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim ~~43~~ 52, wherein the second sloped portion comprises a negative slope.

61. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 60, wherein the second sloped portion comprises a substantially linear slope.

62. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 60, wherein the second ~~positively~~ negatively sloped portion comprises a continuously increasing slope.

63. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 60, wherein the second ~~positively~~ negatively sloped portion comprises a continuously decreasing slope.

64-70. (Cancelled)

71. (Currently Amended) ~~The method, as set forth in claim 69~~ A method of generating a biphasic defibrillation waveform comprising the acts of:

generating a positive voltage phase having an initial positive voltage having a magnitude greater than zero volts and having a first sloped portion extending from the initial positive voltage to a terminal positive voltage having magnitude greater than or equal to zero volts, wherein the first sloped portion comprises a continuously increasing positive slope; and

generating a negative voltage phase having an initial negative voltage having a magnitude less than or equal to zero volts extending from the terminal positive voltage of the positive voltage phase, the negative voltage phase having a second sloped portion extending from the initial negative voltage to a terminal negative voltage having a magnitude less than or equal to zero volts.

72. (Currently Amended) ~~The method, as set forth in claim 69~~ A method of generating a biphasic defibrillation waveform comprising the acts of:

generating a positive voltage phase having an initial positive voltage having a magnitude greater than zero volts and having a first sloped portion extending from the initial positive voltage to a terminal positive voltage having magnitude greater than or equal to zero volts, wherein the first sloped portion comprises a continuously decreasing positive slope; and

generating a negative voltage phase having an initial negative voltage having a magnitude less than or equal to zero volts extending from the terminal positive voltage of the positive voltage phase, the negative voltage phase having a second sloped portion extending from the initial negative voltage to a terminal negative voltage having a

magnitude less than or equal to zero volts.

73. (Currently Amended) ~~The method, as set forth in claim 64,~~ A method of generating a biphasic defibrillation waveform comprising the acts of:

generating a positive voltage phase having an initial positive voltage having a magnitude greater than zero volts and having a first sloped portion extending from the initial positive voltage to a terminal positive voltage having magnitude greater than or equal to zero volts, wherein the first sloped portion comprises a negative slope, the positive phase waveform shape independently selectable from a first set of waveform shapes; and

generating a negative voltage phase having an initial negative voltage having a magnitude less than or equal to zero volts extending from the terminal positive voltage of the positive voltage phase, the negative voltage phase having a second sloped portion extending from the initial negative voltage to a terminal negative voltage having a magnitude less than or equal to zero volts, the negative phase waveform shape independently selectable from a second set of waveform shapes.

74-78. (Cancelled)

79. (Currently Amended) ~~The method, as set forth in claim 77,~~ A method of generating a biphasic defibrillation waveform comprising the acts of:

generating a positive voltage phase having an initial positive voltage having a magnitude greater than zero volts and having a first sloped portion extending from the initial positive voltage to a terminal positive voltage having magnitude greater than or equal to zero volts; and

generating a negative voltage phase having an initial negative voltage having a magnitude less than or equal to zero volts extending from the terminal positive voltage of the positive voltage phase, the negative voltage phase having a second sloped portion extending from the initial negative voltage to a terminal negative voltage having a

magnitude less than or equal to zero volts, wherein the second positively sloped portion comprises a continuously increasing slope.

80. (Currently Amended) ~~The method, as set forth in claim 77,~~ A method of generating a biphasic defibrillation waveform comprising the acts of:

generating a positive voltage phase having an initial positive voltage having a magnitude greater than zero volts and having a first sloped portion extending from the initial positive voltage to a terminal positive voltage having magnitude greater than or equal to zero volts, the positive phase waveform shape independently selectable from a first set of waveform shapes; and

generating a negative voltage phase having an initial negative voltage having a magnitude less than or equal to zero volts extending from the terminal positive voltage of the positive voltage phase, the negative voltage phase having a second sloped portion extending from the initial negative voltage to a terminal negative voltage having a magnitude less than or equal to zero volts, and wherein the second positively sloped portion comprises a continuously decreasing slope, the negative phase waveform shape independently selectable from a second set of waveform shapes.

81. (Currently Amended) ~~The method, as set forth in claim 64~~ A method of generating a biphasic defibrillation waveform comprising the acts of:

generating a positive voltage phase having an initial positive voltage having a magnitude greater than zero volts and having a first sloped portion extending from the initial positive voltage to a terminal positive voltage having magnitude greater than or equal to zero volts; and

generating a negative voltage phase having an initial negative voltage having a magnitude less than or equal to zero volts extending from the terminal positive voltage of the positive voltage phase, the negative voltage phase having a second sloped portion extending from the initial negative voltage to a terminal negative voltage having a

magnitude less than or equal to zero volts, wherein the second sloped portion comprises a negative slope.

82. (Cancelled)

83. (Currently Amended) The method, as set forth in claim 81, wherein the second ~~positively~~ negatively sloped portion comprises a continuously increasing slope.

84. (Currently Amended) The method, as set forth in claim 81, wherein the second ~~positively~~ negatively sloped portion comprises a continuously decreasing slope.

85-102. (Cancelled)